cant difference in inpatient costs (p<0.01) between the 2 groups. **CONCLUSIONS:** The economic burden of patients using new bio-surgical hemostatic materials was considerable. While a number of factors affected inpatient costs, patients using ORC were associated with lower total inpatient expenditure.

PCN48

SYSTEMATIC REVIEW OF ECONOMIC EVALUATIONS IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION

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OBJECTIVES: The objective of this literature review was to explore the existing evidences regarding cost-effectiveness of allogeneic hematopoietic stem cell transplantation (AHSCT) in hematologic cancers (HCs). **METHODS:** A systematic literature review was performed using the PICO method: Population consisted of patients suffering from HCs; Intervention and Comparators were AHSCT compared to different types of AHSCT or standard therapies and Outcomes were incremental cost-utility ratios (ICURs) and/or incremental cost-effectiveness ratios (ICERs). The literature search was performed with the NHS EED filters using electronic databases from 1948 until August 2014. **RESULTS:** The literature review allowed retrieving 5,805 studies of which 13 fulfilled the eligibility criteria. Three studies included economic analysis on acute myeloid leukemia (AML), two on acute lymphoid leukemia (ALL), five on acute leukemias, three on chronic myeloid leukemia (CML) and one on myelodysplastic syndromes. Nine were cost-effectiveness analyses and four were cost-utility analyses. Five studies used a Markov model. The largest proportion of the studies compared AHSCT to standard chemotherapy (SC) (n=5), followed by imatinib (n=2) and various other comparators (n=6). The time horizon varied from 1 year to lifetime. All studies used a health care system perspective. In AML and ALL, ICERs ranged from dominant to (2014US)$154,597/LYG compared to SC. In Philadelphia-positive (Ph+) CML, ICERs for imatinib ranged from dominant to (2014US)$127,013/QALY compared to AHSCT. **CONCLUSIONS:** Most of analyzed studies suggest that AHSCT is cost-effective in AML and ALL compared to SC, but not in Ph+CML when compared to imatinib, despite a wide cost-effectiveness ratios range. This is consistent with current clinical practice in Ph+CML, where tyrosine kinase inhibitors, like imatinib, have replaced AHSCT for first-line therapy. Despite the high level of heterogeneity among selected studies, this review provides a comprehensive overview of the cost-effectiveness of AHSCT in HCs and could serve in the realization of future economic evaluations.

PCN49

ESTIMATION OF DIRECT HEALTHCARE COSTS OF GYNECOLOGIC CANCER IN THE U.S.: AN ANALYSIS OF 2007-2011 MEDICAL EXPENDITURE PANEL SURVEY (MEPS) DATA

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OBJECTIVES: A literature search revealed no prior study on the direct medical costs for gynecologic cancer, including uterine, cervical, ovarian and other gynecologic cancers. The study objective was to estimate the direct healthcare costs of gynecologic cancers among community-dwelling U.S. residents from an all-payer perspective. **METHODS:** A retrospective cross-sectional analysis was conducted using the 2007-2011 Medical Expenditure Panel Survey (MEPS) databases for patients with gynecologic cancers. Direct healthcare costs in the U.S. were estimated using gynecologic cancer-related expenditures by source of payment and service type. Generalized linear models with a gamma distribution and a log link were used to estimate adjusted mean expenditures based on patients' characteristics. Costs were adjusted to 2011 U.S. dollars using the Consumer Price Index-Medical (CPI-M). **RESULTS:** A total of 282 patients (average annual weighted N=568,245) were identified with gynecologic cancer diagnoses across the study years. The estimated annual direct healthcare cost attributable to gynecologic cancers was $3.86 billion. The estimated average annual direct healthcare cost per patient was $6,794 (standard error [SE]=$1,269). Medicare accounted for most of the total expenditures (44%), followed by private insurance (38%). Over half (56%) of the total costs were generated by inpatient hospitalizations. The annual predicted costs (SE) per patient were $5,887 ($1,059) in patients with one type of gynecologic cancer and $13,129 ($6,573) in patients with two different types of gynecologic cancers. The annual predicted cost (SE) per patient with ovarian cancer was $15,693 ($7,912), which was higher than that for uterine ($9,590±$3,636) and cervical cancers ($7,935±$3,668). **CONCLUSIONS:** Gynecologic cancers place a considerable economic burden on society. The majority of expenditures was driven inpatient hospitalizations and Medicare accounted for the largest portion of payments. This study can provide better understanding of the economic burden of gynecologic cancers and contribute to future policy on gynecologic cancer prevention and control programs.

PCN50

HOSPITAL UTILIZATION IN PATIENTS WITH EBSTEIN'S ANOMALY

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OBJECTIVES: Ebstein's anomaly (EA) is a rare congenital heart disorder affecting the tricuspid valve in approximately one out of every 200,000 live births. Treatment for EA is focused on reducing symptoms and avoiding disease progression to complications like heart failure or arrhythmia. The objective of this analysis is to examine hospital-based utilization in patients with EA. **METHODS:** A retrospective cross-sectional study was conducted on EA discharges in the MedAssets health system data for inpatient (IP) and outpatient (OP) visits between January 2009 and December 2014. Age and gender, hospital characteristics, clinical comorbidities and measures of utilization including length of stay (LOS) and readmissions were described. Multivariable regression was used to identify significant drivers of hospital-based utilization. **RESULTS:** Hospital utilization occurred primarily in the OP setting (81.0%) in teaching facilities (88.3%) with 300 or more beds (78.1%). More than half the population was female (56.0%) with a mean Charlson comorbidity score of 0.43. Mean age was 21.6 years with 55.7% under the age of 18. The most common OP procedures were diagnostic (10.3%) while valve and septa operations (15.6%) and heart catheterization (11.9%) were the most frequent IP procedures. Mean LOS was 10.4 days. Congestive heart failure (CHF) (RR 1.31, 95% CI 1.12, 1.51) fluid and electrolyte disorders (ED) (RR 1.68 CI1.46, 5.74), and ventricular septal defects (RR 1.33, CI1.09, 1.62) diagnoses were associated with longer IP stays. 5.0% of patients admitted expired in the hospital and 8.5% were readmitted within 30 days. CHF (OR 2.26 CI 1.10, 5.12), ED (OR 3.51 CI 1.49, 8.62), and cardiac dysrhythmias (OR 2.63 CI 1.22, 8.62), were associated with increased mortality. Only CHF (OR 2.64 CI 1.46, 4.68) was associated with increased readmissions. **CONCLUSIONS:** While EA patients are typically treated in the OP setting hospital utilization is high when IP services are required.

PCN51

HEALTH CARE UTILIZATION AND COST ASSOCIATED WITH RADIOIODINE REFRACTORY (RAI-R) DIFFERENTIATED THYROID CANCER (DTC)

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OBJECTIVES: Thyroid cancer (TC) constitutes ~1% of all diagnosed cancers. DTC is the most common type of TC, accounting for about 95% of all cases. Most patients with DTC respond well to surgery and/or radioiodine therapy (I-131). However, <5% of patients become refractory to I-131. Disease burden and healthcare costs associated with this orphan disease have not been well described. **METHODS:** This retrospective cohort analysis combined data from the Humana and OptumInsight Claims databases from Apr2005-Jun2014. Patients age >=18 years were defined as having RAI-R DTC if they received a tyrosine-kinase inhibitor (TKI) and had >=2 diagnoses of thyroid cancer (ICD-9 code 193.xx) on or prior to the index date (first TKI use). Patients were excluded if no continuous medical/pharmacy coverage in the 6-months pre and post-index. Descriptive results included mean all-cause and thyroid-related total healthcare cost & utilization (inpatient, outpatient and pharmacy), and were assessed 6 months post-index then converted to annual estimates. Results were reported for both the individual and combined datasets. **RESULTS:** A total of 116 patients (Humana=36; Optum=80 patients) were identified. Mean age was 60 years and 45.7% were female. The average time from diagnosis to TKI use was 754 days. The most common TKIs were sorafenib (41.4%), sunitinib (26.7%), and vandetanib (14.7%), and 31.9% of patients used >=2 TKIs. The average number of outpatient and ER visits were 43.4 and 1.2 for all-cause, and 22.2 and 0.3 for thyroid-related, respectively. Rates of hospitalization were 25.0% and 11.2% for all- and thyroid-related causes, with a mean stay of 7.8 and 5.1days, respectively. The average number of all-cause and thyroid-related prescriptions were 40.9 and 15.7, respectively. Total all- and thyroid-related annual healthcare costs were $127,935 and $97,344, respectively. **CONCLUSIONS:** RAI-R DTC is a rare disease, with high disease burden as shown through high rates of healthcare utilization and annual cost.

PCN52

COSTS OF TREATING SKELETAL-RELATED EVENTS AMONG PROSTATE CANCER PATIENTS WITH BONE METASTASES IN A COMMERCIAL INSURED POPULATION IN THE US

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OBJECTIVES: We evaluated the economic burden of treating skeletal-related events (SREs), including pathologic fractures (PF), spinal cord compression (SCC), radiation to bone (RB) and bone surgery (BS), in prostate cancer (PC) patients with bone metastasis (BM). **METHODS:** PC patients with a BM diagnosis between 01/01/2005 and 03/01/2012 were identified in the Truven Health Analytics databases. Propensity score was used to match BM patients with SREs to those without. A pseudo-SRE date was assigned to the control group that was parallel to the SRE date of the matched SRE patients. We compared the total and per member per month (PMPM) costs of patients between two groups for the 6-month post-SRE/ pseudo-SRE date. **RESULTS:** We identified 4,975 PC men with BM where 910 patients with SREs were 1:1 matched to the non-SRE patients. For those men with at least one SRE, 95.8% received RB; 17.6% had PF; 12% received BS; and 10.4% had SCC. On average, the total 6-month costs of treating patients with SREs were $47,724, compared to $24,729 for the matched control cohort (p<0.001). The mean PMPM cost for non-SRE patients was $4,122. The largest proportion of differences in costs between two groups incurred in the first month after the SRE-index date ($16,564 vs. $4,636, p<0.001), and were mostly attributable to outpatient visits (65.7%, p<0.001) and inpatient hospitalization (29.1%, p<0.001). **CONCLUSIONS:** For PC patients with BM, costs of treating those with SREs are significantly higher than comparable patients without SREs. Most of costs were incurred in the first month after the occurrence of SREs, but while costs decreased thereafter, they remained significantly higher for patients with SRE in subsequent months.

PCN53

SYSTEMATIC REVIEW OF EPIDEMIOLOGY AND BURDEN OF PANCREATIC CANCER

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OBJECTIVES: Pancreatic cancer is considered one of the toughest cancers to treat, with extremely poor prognosis. The objective of this research was to conduct a systematic review of epidemiology and the burden of pancreatic cancer. **METHODS:** A systematic literature search for epidemiology and the burden of disease studies was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar and Cochrane. Data was collected for the study type, methods, country and key findings. Extracted study data included pancreatic cancer incidence, complications,